

CLAIMS

What is claimed is:

1. A brake booster assembly for mounting on a vehicle panel having an aperture, said brake booster assembly comprising:

5 a housing;

a mounting bolt extending outwardly from an outer wall of said housing for extending through an aperture of a vehicle panel to mount said brake booster to the vehicle panel; and

10 a clip adapted to be fastened to said mounting bolt, said clip having a securing structure for engaging with a wall of the vehicle panel to at least temporarily mount said brake booster to the vehicle panel.

2. The assembly of claim 1, wherein said clip is removably fastened to said bolt.

15

3. The assembly of claim 1, wherein said clip is resiliently fastened to said bolt.

4. The assembly of claim 1, wherein said clip is sized to extend through the aperture of the wall of the vehicle panel.

20

5. The assembly of claim 4, wherein said clip is sized to extend completely through the aperture of the wall of the vehicle panel.

25 6. The assembly of claim 1, further including a nut adapted to be threadably fastened to said mounting bolt to more securely mount said brake booster to the vehicle panel.

7. The assembly of claim 6 further including a bushing disposed on said mounting bolt between said nut and said outer wall of said housing, said bushing defining an inner cavity for receiving said clip when said nut is threadably fastened to said bolt.

5

8. The assembly of claim 7, wherein said nut and said bushing are separate members.

9. The assembly of claim 1, wherein said clip is generally tubular shaped.

10

10. The assembly of claim 1, wherein said clip is generally tubular shaped defining an axis and having a non-continuous cross-section defining a longitudinal slot in said clip such that said clip is adapted to be resiliently fastened to said bolt in a direction normal to the axis to extend the bolt through said slot.

15

11. The assembly of claim 1, wherein said clip includes integral structures formed therein for engaging with external threads of said mounting bolt to prevent said clip from moving in an axial direction relative to said mounting bolt

20

12. The assembly of claim 1, wherein said clip includes a tapered end for engaging with external threads of said mounting bolt to prevent said clip from moving in an axial direction relative to said mounting bolt.

13. The assembly of claim 1, wherein said securing structure is a tab
25 extending radially outwardly from a tubular wall of said clip, wherein an end of said tab engages with the wall of the vehicle panel.

14. The assembly of claim 13, wherein said tab is a spring tab resiliently extending outwardly from said tubular wall of said clip such that said tab is movable to a generally flush position relative to said tubular wall.

5 15. The assembly of claim 13, wherein said tab is integrally formed in said clip.

16. The assembly of claim 1, wherein said clip is formed from a flat blank of metal, said blank being stamped and formed into a generally open cylindrical
10 shape.

17. The assembly of claim further including;
a master cylinder mounted on said housing;
a fluid reservoir mounted on said master cylinder; and
15 an input rod assembly attached to said master cylinder and adapted to be attached to a pedal assembly.

18. A brake booster assembly for mounting on a vehicle panel having an aperture, said brake booster assembly comprising:

a master cylinder;

5 a fluid reservoir mounted on said master cylinder; and

an input rod assembly attached to said master cylinder and adapted to be attached to a pedal assembly.

a vacuum booster mounted on said master cylinder, said vacuum booster including:

10 a housing; and

a mounting bolt extending outwardly from an outer wall of said housing for extending through an aperture of a vehicle panel to mount said brake booster to the vehicle panel; and

a clip adapted to be fastened to said mounting bolt, said clip including:

15 a body having a generally tubular shape defining an axis and having a non-continuous cross-section defining a longitudinal slot in said clip such that said clip is adapted to be resiliently fastened to the bolt in a direction normal to the axis to extend the bolt through said slot;

20 a tapered end portion for engaging with external threads of the bolt to prevent said clip from moving in an axial direction relative to the bolt; and

a tab extending radially outwardly from said main body of said clip, wherein an end of said tab is engageable with the wall of the vehicle panel to support the brake booster.

19. A clip for mounting a brake booster assembly having a mounting bolt extending outwardly therefrom on a vehicle panel having an aperture for receiving the bolt, said clip comprising:

5 a body having a generally tubular shape defining an axis and having a non-continuous cross-section defining a longitudinal slot in said clip such that said clip is adapted to be resiliently fastened to the bolt in a direction normal to the axis to extend the bolt through said slot;

 a tapered end portion for engaging with external threads of the bolt to
10 prevent said clip from moving in an axial direction relative to the bolt; and

 a tab extending radially outwardly from said main body of said clip, wherein an end of said tab is engageable with the wall of the vehicle panel to support the brake booster.

15 20. The clip of claim 19, wherein said tab is a spring tab resiliently extending outwardly from said tubular wall of said clip such that said tab is movable to a generally flush position relative to said tubular wall.